

**REMARKS**

Claims 1, 22, and 24–27 are pending in this application. By this Amendment, claims 2–11, 13–21, and 23 are canceled, and claims 24–27 are added. No new matter is added.

Entry of the amendments is proper under 37 CFR §1.116 because the amendments: (a) place the application in condition for allowance; (b) do not raise any new issue requiring further search and/or consideration, as the amendments amplify issues previously discussed throughout prosecution); (c) do not present any additional claims without canceling a corresponding number of finally rejected claims; and (d) place the application in better form for appeal, should an appeal be necessary. The amendments are necessary and were not earlier presented because they are made in response to arguments raised in the final rejection. Entry of the amendments is thus respectfully requested.

In view of the foregoing amendments and following remarks, reconsideration and allowance are respectfully requested.

**I. Telephone Interviews**

The courtesies extended to Applicants' representative by Examiner Parkin during the telephone interviews held August 3, 2010 and September 15, 2010 are appreciated. The reasons presented during the interviews as warranting favorable action are incorporated into the remarks below, which constitute Applicants' record of the interviews.

**II. Allowable Subject Matter**

Applicants thank the Examiner for the indication on page 7 of the Office Action that modified human immunodeficiency virus type 1 (HIV-1) gp41 polypeptides corresponding to SEQ ID NOS: 8 and 17–21 are allowable. By this Amendment, claim is amended to incorporate the allowable subject matter, and claim 22 depends from claim 1. The other previous claims are canceled. Thus, the outstanding objections and rejections are moot. Accordingly, allowance of claims 1 and 22 is respectfully requested.

### **III. New Claims**

By this amendment, new claims 24–27 are added. Claims 24 and 26 are independent claims. New claim 24 recites:

24. A modified human immunodeficiency virus type 1 (HIV-1) gp41 polypeptide, comprising amino acid residues 1–108 of SEQ ID NO: 17.

Support for claim 24 may be found, for example, in SEQ ID NO:17, which has already been indicated as allowable. Support for not expressly requiring amino acid residues 109–130 of SEQ ID NO: 17 may be found, for example, in the fact that amino acid residues 125–130 of SEQ ID NO: 17 is a poly-HIS tail, which is optional (see specification, page 9, lines 19-22). As for amino acid residues 109–124, the specification, at page 8, lines 11–13, teaches that in addition to the modification wherein a linker fragment replaces a portion of the connecting loop in the modified gp41 polypeptide, the modified polypeptide may also include other modifications, such as truncation of a part of the amino acid sequence at the N or C-terminal extremities. SEQ ID NO:8, when aligned to the HIV-1 HxB2 sequence set forth in SEQ ID NO:1, shows that amino acids 126–139 of SEQ ID NO:1 are deleted from the C-terminus portion of SEQ ID NO:8, which correspond to amino acids 109–122 of SEQ ID NO:17.

Thus, Applicants respectfully submit that the original disclosure demonstrates that the inventors were in possession of the subject matter of claim 24 at the time of filing. Examination and allowance of claim 24, and claim 25 that depends from claim 24, are respectfully requested.

New claim 26 recites:

26. A modified human immunodeficiency virus type 1 (HIV-1) gp41 polypeptide, comprising the sequence set forth in SEQ ID NO:1, wherein:

amino acids 54–78 are replaced by a linker consisting of the sequence set forth in SEQ ID NO:2; and amino acids 126–139 are deleted.

Support for claim 26 may be found, for example, in SEQ ID NOS: 17, 18, and 21, which, when aligned to the HIV-1 HxB2 sequence set forth in SEQ ID NO:1, show that amino acids 54–78 of SEQ ID NO:1 are replaced by a linker consisting of the sequence set forth in SEQ ID NO:2.

The specification, at page 8, lines 11–13, teaches that in addition to the modification wherein a linker fragment replaces a portion of the connecting loop in the modified gp41 polypeptide, the modified polypeptide may also include other modifications, such as truncation of a part of the amino acid sequence at the N or C-terminal extremities. SEQ ID NO:18, when aligned to the HIV-1 HxB2 sequence set forth in SEQ ID NO:1, shows that amino acids 126–139 of SEQ ID NO:1 are deleted from the C-terminus portion of SEQ ID NO:18.

Thus, Applicants respectfully submit that the original disclosure demonstrates that the inventors were in possession of the subject matter of claim 26 at the time of filing.

Examination and allowance of claim 26, and claim 27 that depends from claim 26, are respectfully requested.

#### **IV. Conclusion**

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of the application are earnestly solicited.

Should the Examiner believe that anything further would be desirable to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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